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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/692,569	10/19/2000	Keiji Watanabe	0941.64850	7511	
. 7:	7590 02/17/2004			EXAMINER	
Patrick G. Burns, Esq. Greer, Burns & Crain, Ltd. 300 S. WACKER DRIVE 25TH FLOOR Chicago, IL 60606			RESAN, STEVAN A		
			ART UNIT	PAPER NUMBER	
			1773		
			DATE MAILED: 02/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/692,569	WATANABE ET AL.
Office Action Summary	Examiner	Art Unit
	Stevan A. Resan	1773
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on 16 Ja 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 16-19 and 30-32 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 16-19 and 30-32 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		•
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) M Notice of References Cited (PTO-892)	4) 🗀 Internitorus Sur	(/DTO 413)
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-21-03 has been entered.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- The following is a quotation of the first paragraph of 35 U.S.C. 112:
 The specification shall contain a written description of the invention, and of the manner and process of

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 16-19, 30-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support in the specification for a lubricating layer having both a photocrosslinking functional group AND a non-polar endcap group. It appears that the non-polar endcap group may be a photocrosslinking functional group (second embodiment) OR a non-polar endcap group as disclosed in the third embodiment. If applicants traverse they are requested to point out in the specification the description of such a molecule and the polymerization procedures to synthesize such a molecule.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16-19, 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 uses the term "non- polar endcap group" which is deemed indefinite and contrary to its ordinary meaning.

- 7. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "non polar endcap group" in claim 16 is used by the claim to mean members of a specific Markush group, while the accepted meaning is an endcap group which does alter the polarity of the molecular chain which would occur as demonstrated by the presence of some members of applicants' Markush group. The term is indefinite because the specification does not clearly redefine the term.
- 8. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunuma et al US 5409738 in view of Wright US 5891530 for the reasons of record.
- 9. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burguette et al US 4705699 in view of Nohr et al US 5747550 for the reasons of record.

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10. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons et al US 6045864 in view of Lewis et al US 6204504 for the reasons of record.

11. Applicant's arguments filed 11-21-2003 have been fully considered but they are not persuasive. The claim language of applicant's amendment is unclear and hence the examiner is maintaining the rejections. (See MPEP 2173.06)

Applicant's argue that the cited references do not teach or suggest a non-polar endcap group to improve adhesion to the surface of the magnetic disk. However there is a substantial question as to the meaning of "non-polar". Applicants have cited examples of what they consider polar and what they consider non-polar, however there is no guidance or teaching putting one of ordinary skill in the art on notice of the metes and bounds of polarity other than the Markush groups presented.

The prior art has recognized some of what applicants consider non-polar groups as polar by virtue of the presence of strongly polar atoms such as halogen or nitrogen in the endcap. In addition a photocrosslinking functional group may also be a "non-polar group"; thus the same group on each end of the chain (as in the cited references) would meet the claim limitation.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stirniman et al US 6589641 is cited for teaching a method of making a magnetic disk comprising the steps of : coating a disk surface having a carbon overcoat with a lubricating layer comprising molecules having a photocrosslinking functional groups

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which are also non-polar endcap groups, and causing the crosslinking of the molecules with UV radiation. Stirniman suggests that a piperonyl group may be used.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached at 571-272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEVAN A. RESAN PR!MARY EXAMINER